

What is claimed is:

1. The method of inhibiting percutaneous absorption of a contaminant chemical on a person's skin comprising:

applying to the person's skin a non-aqueous solvent system including plural skin-safe constituents each having a molecular weight of at least 350, the constituents including at least one solvent in which the contaminant chemical is soluble.

2. The method of claim 1, wherein the solvent system is applied to the person's skin before exposure to the contaminant chemical to serve as a barrier.

3. The method of claim 2, wherein the solvent system is applied to a person's skin which has not been wetted with water.

4. The method of claim 1, wherein the applying step includes applying a solvent system which includes a reactive chemical deactivation agent for deactivating the contaminant chemical.

5. The method of claim 1, wherein the applying step includes applying a solvent system which includes an organic pH modifier.

6. The method of claim 1, wherein the applying step includes applying a solvent system which includes an ultra-violet radiation blocker.

7. The method of claim 1, wherein the applying step includes applying a solvent system which includes at least one insect repellent.

8. The method of claim 1, wherein the solvent system is applied to the person's skin subsequent to exposure to the contaminant chemical for use in cleansing the contaminant chemical from the skin.

9. The method of claim 1, and further comprising rinsing the solvent system and any dissolved contaminant chemical from the skin with water.

10. The method of claim 9, wherein the applying step includes applying a solvent system which includes at least one skin-safe emulsifier having a molecular weight of at least 350.

11. The method of claim 1, wherein the applying step includes applying a solvent system including plural solvents having different solubility ranges.

12. The method of claim 11, wherein the solvent system applied is oil-based.

13. The method of claim 11, wherein the solvent system applied is glycol-based.

14. A method of decontamination of a contaminated surface exposed to a contaminant chemical, comprising:

applying to the contaminated surface a non-aqueous solvent system including plural constituents each having a molecular weight of at least 350, the constituents including at least one solvent in which the contaminant chemical is soluble.

15. The method of claim 14, wherein the contaminated surface is human skin.

16. The method of claim 14, wherein the contaminated surface is the surface of protective clothing or equipment.

17. The method of claim 14, wherein the applying step is performed before the contaminated surface is wetted with water.

18. The method of claim 14, and further comprising: rinsing the solvent system and any dissolved contaminant chemical from the contaminated surface with water.

19. The method of claim 18, and further comprising: drying the rinsed contaminated surface and then reapplying the solvent system to the dried surface.

20. The method of claim 19, and further comprising: rinsing the reapplied solvent system and any dissolved contaminant chemical from the skin with water.

21. The method of claim 14, wherein the applying step includes applying a solvent system which includes plural solvents having different solubility ranges.

22. The method of claim 14, wherein the applying step includes gentle rubbing or physical agitation of the contaminated surface.